## **RAW SEQUENCE LISTING**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:	10/620,787A
Source:	1FW/6 ,
Date Processed by STIC:	7/19/06

## ENTERED



IFW16

RAW SEQUENCE LISTING DATE: 07/19/2006
PATENT APPLICATION: US/10/620,787A TIME: 08:57:20

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3 <110> APPLICANT: Simard, John
        Simms, John J.
        Qiu, Zhiyong
 7 <120> TITLE OF INVENTION: Immunogenic Compositions Derived from Poxviruses and Methods
        Using Same
10 <130> FILE REFERENCE: 51300-00006
12 <140> CURRENT APPLICATION NUMBER: 10/620,787A
13 <141> CURRENT FILING DATE: 2003-07-15
15 <150> PRIOR APPLICATION NUMBER: 60/396,293
16 <151> PRIOR FILING DATE: 2002-07-15
18 <160> NUMBER OF SEQ ID NOS: 33
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23 <211> LENGTH: 250
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41 Cys Asn Leu Thr Val Lys Asn Met Cys Ser Ala Asp Ala Asp Ala Gln
45 Leu Asp Ala Val Leu Ser Ala Ala Thr Glu Thr Tyr Ser Gly Leu Thr
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53 Ile Gln Thr Ser Val Asn Thr Val Val Arg Asp Phe Glu Asn Tyr Val
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57 Lys Gln Thr Cys Asn Ser Ser Ala Val Val Asp Asn Lys Leu Lys Ile
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65 Asn Leu Glu Phe Ile Asn Thr Gly Ser Ser Lys Gly Asn Cys Ala Ile
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73 Lys Gln Val Ala Gly Thr Gly Val Gln Phe Tyr Met Ile Val Ile Gly
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77 Val Ile Ile Leu Ala Ala Leu Phe Met Tyr Tyr Ala Lys Arg Met Leu
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of

Input Set : A:\5130000006 Sequence Listing.txt
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	Arg	TTE	ser		цуѕ	ьеи	GIU	GIII		Ald	ASII	Ата	ser		GIII	Thr
176	T	a	7 ~~	20	C1	T1.	<b>~1</b>	7 ~ ~	25 Dha	M+	т1.	71	<u>ما</u> ء	30	TT i a	<b>C1</b>
	гуѕ	cys	_	тте	GIU	TTE	GTÅ		Pne	ıyı	TTE	Arg		Asn	птѕ	GIY
180	<b>~</b>	7	35	mb so	7707	T	7 ~~	40	O	C	71.	7	45	7 ~~	77.	<b>~1</b> ~
	Cys		ьeu	Thr	vai	ьуѕ		мес	Cys	ser	Ата		Ala	Asp	Ата	GIN
184		50	n 7 -	77-7	<b>.</b>	0	55	77.	m)	<b>~</b> 1	m1	60		<b>~1</b>	T	ml
		Asp	Ата	vai	ьeu		Ala	Ala	Thr	GIU		Tyr	ser	Gly	Leu	
188		<b>~1</b>	<b>a</b> 1			70	**7	<b>D</b>	77.	36-4	75 Dh	m1	77.	77-	<b>.</b>	80
	Pro	GIU	GIN	ьys		Tyr	vaı	Pro	Ата		Pne	Thr	Ата	Ala		Asn
192		<b>~</b> 1	m1		85	•	m1	** - 7	** - 7	90	•	D1	<b>a</b> 1	<b>7</b>	95	77- <b>7</b>
	ше	GIN	Thr		vaı	ASI	Thr	vai		Arg	Asp	Pne	GIU	Asn	Tyr	vai
196	<b>T</b>	<b>01</b>	m1	100	7	0	<b>a</b>	77-	105	77 7	3	7	<b>T</b>	110	T	T1 -
	ьуs	Gin		Cys	Asn	ser	ser		vai	vai	Asp	Asn	_	Leu	ьys	тте
200	~3	_	115	<del>-</del>	-1.	_	~1	120	_	<b>~</b> 1			125	<b>.</b>	<b>D</b>	ml
	GIn		vai	11e	ше	Asp		Cys	Tyr	GIĀ	Ala		GIY	Ser	Pro	Thr
204	_	130	~-3	_,		_	135		_	_	_	140	_	_		3
		Leu	Glu	Pne	шe		Thr	GIY	Ser	Ser	-	GIY	Asn	Cys	Ата	
	145		_			150	_,	_,	_		155	-1	~ 7			160
	Lys	Ala	Leu	Met		Leu	Thr	Thr	гÀг		Thr	Thr	GIn	Ile		Pro
212	_	~7			165		~3		~7	170	_		~ 7		175	~1
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216				180			_	-1	185	_	_		_	190		_
	vaı	11e		Leu	Ala	Ala	ьeu		Met	Tyr	Tyr	Ala	-	Arg	Met	Leu
220	-1		195	_,	_	_	_	200	_	_	~ 7	_	205	_	_	~3
	Phe		Ser	Thr	Asn	Asp	_	TTE	Lys	Leu	ше		Ата	Asn	га	GIU
224		210			m)	m)	215			m1	D1	220	3	m)	<b>a</b>	D
		vaı	HIS	Trp	Thr		Tyr	Met	Asp	Thr		Pne	Arg	Thr	ser	
	225	7			m)	230		-1	~1		235					240
	Met	vaı	шe	Ala		Thr	Asp	тте	GIN							
232	01/		70 TI		245					250						
				ОИС												
				H: 25	50											
	<212				17	! _ 1 _										
				ISM:		iora	VIII	ıs								
				NCE:		C	T1 _	<b>~1</b>	mla sa	(T) b- s-c	3703	7	mb	т	Com	<b>~1</b>
		СТУ	Ala	Ата		ser	тте	GIII	Ini		vai	ASII	THE	ьeu		Glu
243		<b>T</b> 1 -	<b>a</b>	<b>a</b>	5	T	<b>~1</b>	~1	<b>~</b> 1	10	7	77.	C	77.	15	m\
	Arg	iie	ser		ьуѕ	Leu	GIU	GIN		Ala	ASII	Ala	ser	Ala	GIN	THE
247	<b>T</b>	<b>G</b>	7	20	<b>~</b> 1	<b>-</b> 1-	<b>~</b> 3	7	25 Di-		<b>~1</b> ~	7	a1	30	77.2 -	<b>a</b> 1
	гÀг	Cys		шe	GIU	TTE	GIY		Pne	Tyr	ire	Arg		ASII	HIS	Gly
251	<b>~</b>	7	35	m1	**- 7	<b>7</b>	3	40	<b>G</b>	0	7 T -	7	45	7	7 T -	<b>a</b> 1
	cys		ьeu	ınr	vaı	ьys		Mec	cys	ser	нта		AId	ASP	нта	Gln
255	Ψ	50	7 J _	17- T	T	0	55	70.7	ml	<b>~</b> 3	ml	60 m	0	<b>~1</b>	T ~~·	mb
		Asp	ATG	val	ьeu		ATG	ATG	ınr	GIU		ıyr	ser	Gly	ьeu	
259		α1	C1 -	T	<b>π</b> 7 -	70	17-3	D	7A 7 _	Mek	75	ml	7 J	777~	T 6	80
	PLO	GIU	GIII	ьλε		ı Ar.	vaı	PLO	Ald		rne	inr	ATG	Ala		ASII
263	<b>~</b> 1 -	<b>a</b> 3	ml	0	85	7	ml	17. 7	17 - T	90	7	m1	~1	7	95	77 7
266	тте	GIN	ınr	ser	vaı	Asn	Thr	vaı	vaı	arg	Asp	rne	GIU	ASN	Tyr	Val

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291	VUI	110	195	шец	niu	7.1 u	Dea	200		- 1 -	- 1 -	u	205	9		200
	Dho	Thr		Thr	7 cn	7 cn	Tara		Lys	LOU	T10	T 011		7 cn	Tarc	Glu
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295	70	210	TT	<b></b>	m1	m1		<b>36-</b> L	7	mla sa	Db =		7	mla aa	C	Desc
		vai	HIS	Trp	Thr		Tyr	Met	Asp	Thr		Pne	Arg	mr	ser	
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314 316 317 320 321 325 328 329 332 333 340 341 345 349 352 353 356 357	<pre>&lt;400 Met 1 Arg Lys Cys Leu 65 Pro Ile Lys Gln Asn 145 Lys</pre>	O> SI Gly Ile Cys Asn 50 Asp Glu Gln Asn 130 Leu	EQUENT Ala Ser Asp 35 Leu Ala Gln Thr Thr 115 Val Glu Leu	NCE: Ala Ser 20 Ile Thr Val Lys Ser 100 Cys Ile Phe Met	SAla SLys Glu Val Leu Ala 85 Val Asn Ile Ile Gln 165	Ser Leu Ile Lys Ser 70 Tyr Asn Ser Asp Asn 150 Leu	Ile Glu Gly Asn 55 Ala Val Thr Ser Glu 135 Thr	Gln Gln Asn 40 Met Ala Pro Val Ala 120 Cys Gly Thr	Thr Glu 25 Phe Cys Thr Ala Val 105 Val Tyr Ser	Thr 10 Ala Tyr Ser Glu Met 90 Arg Val Gly Ser Ala 170	Val Asn Ile Ala Thr 75 Phe Asp Asp Ala Lys 155 Thr	Asn Ala Arg Asp 60 Tyr Thr Phe Asn Pro 140 Gly Thr	Thr Ser Gln 45 Ala Ser Ala Glu Lys 125 Gly Asn Gln	Leu Ala 30 Asn Asp Gly Ala Asn 110 Leu Ser Cys Ile	Ser 15 Gln His Ala Leu 95 Tyr Lys Pro Ala Ala 175	Glu Thr Gly Gln Thr 80 Asn Val Ile Thr Ile 160 Pro

361				180					185					190		
364	Val	Ile	Ile	Leu	Ala	Ala	Leu	Phe	Met	Tyr	Tyr	Ala	Lys	Arg	Met	Leu
365			195					200					205			
368	Phe	Thr	Ser	Thr	Asn	Asp	Lys	Ile	Lys	Leu	Ile	Leu	Ala	Asn	Lys	Glu
369		210					215					220				
372	Asn	Val	His	Trp	Thr	Thr	Tyr	Met	Asp	Thr	Phe	Phe	Arg	Thr	Ser	Pro
373				-		230	•		-		235		_			240
		Val	Ile	Ala	Thr	Thr	Asp	Met	Gln	Asn						
377					245					250						
	<210	)> SE	EQ II	NO:												
	<211> LENGTH: 110															
	2 <212> TYPE: PRT															
					Vaco	inia	a vii	cus								
			EQUEN													
						Phe	Pro	Glv	Asn	Asp	Asn	Len	Δla	Tle	Pro	Ala
388		лор	Gry	1111	5	1110	110	CLY	пор	10	пор	шси	niu	110	15	71 <u>1</u> u
		Glu	Dhe	Dhe	-	Thr	Lys	Δla	Δla		Lvc	Pro	Asn	Δτα		Ara
392	1111	<b>01</b> u	1110	20	DCL	1111	цу	nia	25	Lys	Lys		1101	30	шуы	**** 9
	Glu	Gln	Tle		Lvs	Δla	Asp	Glu		Asp	Asn	Glu	Glu		Len	Lvs
396	014	0	35	· · · ·	2,0	1114	1100	40	1105			010	45		Lou	2,5
	Gln	Δra		Thr	Δen	T.e.ii	Glu	-	Lvc	Tle	Thr	Asn		Thr	Thr	Lvs
400	01	50	шеш		11011	u	55	2,5				60				270
	Dhe		Gln	Tle	Glu	Lvc	Cys	Cvs	Lvc	Δra	Asn		Glu	Val	T.e.11	Phe
404		Olu	0111	110	Olu	70	Cys	Cys	Lys	**** 9	75	1100	Q1u	V W I	LCu	80
		T.011	Glu	Δen	Hic		Glu	Thr	T.e.11	Δra		Δla	Met	Tle	Ser	
408	nr 9	пси	Olu	Hon	85	niu	Jiu	1111	Dea	90	1114	2114	1100		95	200
	Δla	Lvc	Lvc	Tle		Val	Gln	Thr	Glv	-	Δra	Pro	Tvr	Glu	,,	
412	ALG	цур	טעם	100	пор	vai	0111	1111	105	**** 9	****9	110	- 7 -	110		
	-210	)	EQ II		. 7				103							
			ENGTE													
			PE:													
					Vaco	ini:	a vii	C11 C								
			EQUEN					·us								
						Dhe	Pro	Glv	Δen	Agn	Δsn	T.e.11	Δla	Tle	Pro	Δla
423		App	Gry	1111	5	LIIC	110	Ory	дор	10	пор	Deu	ALG	110	15	7124
		Glu	Phe	Phe		Thr	Lys	Δla	Δsn		Lvs	Pro	Glu	Δla		Ara
427	****	OIU	1110	20	UCI		Lyo	1114	25	-17.5	_,,,		014	30	_,	*** 9
	Glu	Δla	Tle		Lvs	Δla	Asp	Glu		Asn	Asn	Glu	Glu		T.eu	Lvs
431	Olu	riiu	35	vai	цур	1114	riop	40	1100	1101	11011	014	45		LCu	272
434	Gln	Δra	Len	Thr	Δan	Leu	Glu	Lvc	Lvs	Tle	Thr	Asn	Val	Thr	Thr	Lys
435	0111	50	LCu		71011	шси	55	Lyb	Lyo			60	· · · ·			2,2
	Dhe		Gln	Tle	Glu	Lvc	Cys	Cvs	Lvs	Δra	Acn		G111	Val	T.e.ii	Phe
439		OIU	0111	110	014	70	Cyb	Cyb	טעט	****9	75	пор	014	var	шси	80
		T.e.11	Glu	Δen	Hic		Glu	Thr	T.eu	Δra		Δla	Met	Tle	Ser	
443	9		J_4	-111	85		UI U		u	90					95	
	Ala	Lvs	Lvs	Πe		٧al	Gln	Thr	G) v		Ara	Pro	Tvr	G] 11		
447		-,5	-10	100					105	3	3		-1-	110		
	<21 <i>(</i>	)> <1	EQ II		. 8				-00							
			ENGTE													
± J ±	~41.	11	-11-C-11													

Input Set : A:\5130000006 Sequence Listing.txt
Output Set: N:\CRF4\07192006\J620787A.raw

## Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:5,10,15,20,27,32,33

VERIFICATION SUMMARY

. . . .

DATE: 07/19/2006 TIME: 08:57:21

PATENT APPLICATION: US/10/620,787A